

AMENDMENTS TO THE CLAIMS

What is claimed is:

1. (Currently Amended) A printer comprising:
at least one laser driver;
a print control engine; and
a video controller, bidirectionally connected to the print control engine and the at least one laser driver via a system bus, having a video block that includes, a direct memory access (DMA) controller[[,]];
a video processor[[,]];
a first data bus and control bus electrically connecting the DMA controller to the video processor[[,]];
a video signal generator, connected to the video processor[[,]];
a second data bus and control bus connecting the video processor to the video signal generator[[,]];
a frequency synthesizer connected to the video signal generator[[,]];
configuration registers bidirectionally connected to the DMA controller, video processor, the video signal generator and the frequency synthesizer[[,]]; and
a data bus and control bus electrically connecting the DMA controller and the configuration registers to the system bus.
2. (Currently Amended) A printer[[,]] as defined in claim 1, the data bus and control bus including: a third data bus and control bus electrically connecting the configuration registers to the system bus; and a fourth data bus and control bus, electrically connecting the DMA controller to the system bus.
3. (Currently Amended) A printer[[,]] as defined in claim 1, wherein the video controller generates one pass of the one laser driver, the image generated being monochromatic.

4. (Currently Amended) A printer[[,]] as defined in claim 1, wherein the video controller generates multiple passes of the laser driver, the image generated containing four color planes.
5. (Currently Amended) A printer[[,]] as defined in claim 1[[,]] further comprising three color laser drivers, each connected to the video controller which has four video blocks, the image generated being an in-line color image.
6. (Currently Amended) A printer[[,]] as defined in claim 1, wherein: the video controller further includes a second video block; and a second laser driver connected to the video controller.
7. (Currently Amended) A printer[[,]] as defined in claim 6, wherein the video controller controls sharing the pass of the two laser drivers, the image generated being monochromatic.
8. (Currently Amended) A printer[[,]] as defined in claim 6, wherein the video controller generates multiple passes for each laser driver, the image generated containing four color planes.
9. (Currently Amended) A printer[[,]] as defined in claim 6[[,]] further comprising seven laser drivers, each connected to the video controller which has eight video blocks, the image generated being in-line color image.

Claims 10 to 17 (Canceled).

18. (New) A printer having a laser driver, a print control engine and a video controller bidirectionally in communication with the print control engine and the laser driver via a system bus, the printer comprising:
- a video block, the video block in communication with the video controller and configured to include:
 - a direct memory access (DMA) controller;
 - a video processor;
 - a first data bus and control bus communicatively coupling the DMA controller to the video processor;
 - a video signal generator in communication with the video processor;
 - a second data bus and control bus communicatively coupling the video processor to the video signal generator;
 - a frequency synthesizer in communication with the video signal generator;
 - configuration registers bidirectionally in communication with the DMA controller, video processor, the video signal generator and the frequency synthesizer; and
 - a third data bus and control bus communicatively coupling the DMA controller and the configuration registers to the system bus.
19. (New) The printer as defined in claim 18, wherein the third data bus and control bus further comprise:
- a fourth data bus and control bus communicatively coupling the configuration registers to the system bus; and
 - a fifth data bus and control bus communicatively coupling the DMA controller to the system bus.
20. (New) The printer as defined in claim 18, wherein the video controller controls one pass of the at least one laser driver to generate a monochromatic image.

21. (New) The printer as defined in claim 18, wherein the video controller controls multiple passes of the at least one laser driver to generate an image containing a plurality of color planes.
22. (New) The printer as defined in claim 18 further comprising a plurality of color laser drivers, each of the plurality of color laser drivers being in communication with the video controller which comprises a plurality of video blocks configured to generate an in-line color image.
23. (New) The printer as defined in claim 18, wherein the video controller further includes:
 - a second video block; and
 - a second laser driver in communication with the video controller.
24. (New) The printer as defined in claim 23, wherein the video controller controls sharing a pass of the laser driver and the second laser driver to generate a monochromatic image.
25. (New) The printer as defined in claim 23, wherein the video controller generates multiple passes for each laser driver to generate an image containing four color planes.